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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,849	12/29/2000	Peter Graham Craven	DOL06504-US	6732
7590		11/02/2005		
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		EXAMINER		
		TIV, BACKHEAN		
		ART UNIT		
		PAPER NUMBER		
		2151		

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/720,849	<b>Applicant(s)</b> CRAVEN ET AL.	
	<b>Examiner</b> Backhean Tiv	<b>Art Unit</b> 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 8/8/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 3,4,16-21,25,29,31-33 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,5-15,22-24,26-28,30 and 34-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,4,16-21,25,29,31-33 and 45-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/00,10/01</u> | 6) <input type="checkbox"/> Other: _____  |

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### ***Detailed Action***

Claims 3,4,16-21, 25,29,31-33,45-50 are pending in this application.

Claims 1,2,5-15,22-24,26-28,30,34-44 have been cancelled. This is a response to the Election filed on 8/8/05.

### ***Priority***

Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in the United Kingdom on 7/3/1998(United Kingdom 9814513.9) and 4/7/1999(United Kingdom 9907918.8). A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

The applicant has also claimed priority to PCT/GB99/02138 filed on 7/5/1999, the US application was filed more than one year after the PCT.

### ***Information Disclosure Statement***

The IDS filed on 12/00, and 10/01 have been considered.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3,4,16-21, 25,29,31-33,45-50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54 of U.S. Patent No. 6,023,233 issued to Craven et al.(Craven). Although the conflicting claims are not identical, they are not patentably distinct from each other because this instant application recites a minimum data rate while US Patent 6,023,233 recites a predetermined data rate. One ordinary skill in the art at the time of the invention would know that a predetermined data rate can be a minimum data rate or vice versa.

#### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C 121:

- I. Claims 1,4,5,9,10,12-15,22,26,29,31-33, are drawn encoding data at a variable rate stream, classified in class 381, subclass 23.
- II. Claims 2,6,10-13 are drawn to encoding data at a fixed rate stream, classified in class 382, subclass 251.
- III. Claims 23,24,28,30-35,37-44, are drawn to converting from a variable rate stream to a fixed rate stream, classified in class 370, subclass 503.
- IV. Claims 3,7,10,11,13,16-21,25-27,29,31-33,45-50 are drawn to decoding data, classified in class 381, subclass 22.

Applicant's election without traverse of group IV in the reply filed on 8/8/05 is acknowledged.

### ***Claim Objections***

Claim 45-49 are objected to because of the following informalities:

As per claim 45, recites, "organised", there is no such word. The examiner will assume, "organized" for examination purposes.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-,21,48,49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 21, 48,49, it is unclear what is meant by MLP.

As per claim 16-21, describes a system, while, claim 3, describes a process. It is unclear whether the applicant is claiming a system or a process.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 3,4,16-18,21, 25,29,31,32,45-50 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 5,617,145 issued to Huang et al.(Huang).

As per claim 3, 25, Naimpally teaches an encoder for producing an encoded packetised stream(Abstract), including comprising : means for determining data rate to which the packetised stream could be repacketised for successful decoding by a decoder having given first-in-first-out (FIFO) buffer size(col.5, lines 42-62); and

Naimpally however does not explicitly teach determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum.

Huang teaches determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum(col.6, lines 59-col.7, line 45).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum as taught by Huang in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Huang in order to provide a process of encoding/decoding data at different data rates.

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As per claim 4, 29,47 wherein the encoded stream is losslessly compressed digital audio data(Naimpally, col.1, lines 35-67).

As per claim 16, A mastering system comprising the encoder as claimed in claim 3(Naimpally, Fig.1-3).

As per claim 17, a system comprising a mastering system as claimed in claim 16, and means for repacketising the data to form, a stream having a peak data rate calculated in dependence upon the control data(Huang, Figs.2-9).  
Motivation to combine set forth in claim 3.

As per claim 18, a system as claimed in claim 17, wherein the stream having a peak data rate corresponding to the control data comprises a fixed rate stream(Huang, col.2, lines 34-44). Motivation to combine set forth in claim 3.

As per claim 21, 48 a system as claimed hi any one of claims 17 to 20, wherein the encoder comprises an MLP lossless encoder for audio data(Naimpally, col.3, lines 31-60).

As per claim 31, the data processing method of claim 25, further comprising processing the control data to determine an adequate bandwidth for transmission of the encoded variable rate stream, and transmitting the encoded variable rate stream over an interface having at least the adequate bandwidth(Huang, col.1, lines 39-56). Motivation to combine set forth in claim 3.

As per claim 32, the data processing method of claim 31 wherein the interface operates at a fixed data rate(Huang, col.1, lines 39-56). Motivation to combine set forth in claim 3.

As per claim 45, Naimpally teaches a device for decoding variable rate data organized as a stream of packets, each packet including a corresponding decoder time stamp(Abstract), the device comprising: a FIFO buffer having an input coupled to the feed buffer for receiving the stored data, and having an output(Abstract, col.1, lines 21-34); and a decoder having an input coupled to the output of the FIFO buffer(Abstract, col.1, lines 21-34).

Naimpally however does not explicitly teach a feed buffer that receives tire stream of packets to mitigate any interruption in the stream of packets.

Huang teaches a feed buffer that receives tire stream of packets to mitigate any interruption in the stream of packets(Abstract, Fig.1-9).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to a feed buffer that receives tire stream of packets to mitigate any interruption in the stream of packets as taught by Huang in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Huang in order to provide a process of encoding/decoding data at different data rates.

As per claim 46, the device of claim 45, wherein the feed buffer stores the stream until the corresponding decoder time stamp for each packet is identified(Naimpally, Abstract).

As per claim 49, the device of claim 45, wherein the decoder is an MLP decoder(Naimpally, Abstract).



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As per claim 50, a decoder that decodes the encoded variable rate stream that includes said control data as provided by claim 25(Naimpally, Abstract, col.5, lines 42-61).

Claims 19,20,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 5,617,145 issued to Huang et al.(Huang) in further view of US Patent 6,009,229 issued to Kawamura.

Naimpally in view of Huang teaches all the limitations of claim 3,25, however, does not explicitly teach as per claim 19, 20, 33 a system for providing encoded data to a DVD comprising a mastering system and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder.

Kawamura teaches a system for providing encoded data to a DVD comprising a mastering system as claimed in claim 16, and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder(Figs. 1-22,col.1, lines 14-col.2, lines 23).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teaching of Naimpally in view of Huang to use a DVD to encode data as taught by Kawamura in order to store more data than that of other media.

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One ordinary skill in the art would have been motivated to combine the teachings of Naimpally, Huang, and Kawamura in order to provide a process to encode MPEG files on a DVD.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

US Patent 5,623,490 issued to Richter et al.

US Patent 5,455,841 issued to Hazu

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571)272-3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT

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2151  
10/29/05



ZARNI MAUNG

SUPERVISORY PATENT EXAMINER